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TITLE: PROCESS FOR AFFORDING HYDROPHILIC PROPERTY TO

HYDROPHOBIC POROUS FILM

PUBN-DATE: January 28, 1987

INVENTOR-INFORMATION:

NAME

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ABSTRACT:

PURPOSE: To afford hydrophilic property to hydrophobic porous film without

accompanying decrease of water permeability with the lapse of time by placing

hydrophobic porous film in ozone atmosphere at ≤80°C, then treating with polyol soln.

CONSTITUTION: Hydrophobic porous film which is as it is impermeable for

liquid having high surface tension such as aq. soln. unless high pressure is

applied, is used. The film is exposed at ≤80°C for 1sec∼2hr in

atmosphere having 0.001∼ 3vol% ozone concn. Thus, hydrophilis

groups such as

OH, CO, COOH, are formed on the surface of fine pores. Within 3hr after the

ozone treatment, the film is treated further with soln. of polyol having

 $90\∼10,000$ mol.wt. such as glycerin, polyethylene glycol, etc. The polyol

is used as 10∼ 80% concn. soln. by dissolving the polyol in a solvent having

low viscosity and surface tension such as alcohol, acetone, etc.

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